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Herniated Disc

A "slipped" or "ruptured" disk in their neck or lower back. What they're actually describing is a herniated disk, a common source of neck, or lower back and arm or leg pain.

Disks are soft, rubbery pads found between the hard bones (vertebrae) that make up the spinal column.

In the middle of the spinal column is the spinal canal—a hollow space that contains the spinal cord and other nerve roots. Disks act as shock absorbers.

Disks in the lumbar spine (low back) are composed of a thick outer ring of cartilage (annulus) and an inner gel-like substance (nucleus). In the cervical spine (neck), the disks are similar but smaller in size. A helpful comparison is a jelly donut: its thick outer portion represents the annulus, while the jelly is similar to the nucleus.

A disk herniates or ruptures when part of the center nucleus pushes through the outer edge of the disk. And this jelly pushes backwards toward the spinal canal. This puts pressure on the nerves. Spinal nerves are very sensitive to even slight amounts of pressure. Pain, numbness or weakness may occur in one or both legs.

Risk Factors/Prevention

In children and young adults, disks have high water content. As people age, the water content in the disks decreases. They become less flexible. The disks begin to shrink. The spaces between the vertebrae get narrower. The disk itself becomes less flexible. Conditions that can weaken the disk include:

- Improper lifting
- Smoking
- Excessive body weight that places added stress on the disks
- Sudden pressure (which may be slight)
- Repetitive strenuous activities

How do I know, I have a herniated disc?

1. Lower Back: Pain alone isn't enough to recognize a herniated disk.
2. The most common symptom of a herniated disk is sciatica—a sharp, often shooting pain that extends from the buttocks down the back of one leg. It is caused by pressure on the spinal nerve. Other symptoms include:
 - Weakness in one leg
 - Tingling (a "pins-and-needles" sensation) or numbness in one leg or buttock
 - Loss of bladder or bowel control
 - A burning pain centered in the neck

Neck

Like pain in the lower back, neck pain is also common.

When pressure is placed on a nerve in the neck, it causes pain in the muscles between your neck and shoulder (trapezial muscles).

The pain may shoot down the arm. Sometimes the pain causes headaches in the back of the head.

Other symptoms include:

- Weakness in one arm

- Tingling (a "pins-and-needles" sensation) or numbness in one arm

- Loss of bladder or bowel control (If you also have significant weakness in both arms or legs, you could have a serious problem.

Burning pain in the shoulders, neck or arm

What tests will my doctor run?

A complete medical history. Tell him or her if you have neck/back pain with gradually increasing arm/leg pain.

Tell the doctor if you were injured.

The doctor will physically examine you. This can determine which nerve roots are affected (and how seriously).

A simple X-ray may show evidence of disk or degenerative spine changes.

- MRI or CT

Treatment Options

Conservative treatment is effective in in more than 90 percent of patients.

Most neck or back pain will resolve gradually with simple measures.

Bed rest for couple of days.

Medication: Muscle relaxers, analgesic and anti-inflammatory medications are also helpful.

Physio: Cold compresses or ice for no more than 20 minutes

- Gentle heat applications.

- Any physical activity should be slow and controlled

- For the lower back, exercises may also be helpful

- For the neck, exercises or traction may also be helpful.

Treatment Options: Surgical

If conservative treatment fails,

1. epidural injections of a cortisone-like drug may lessen nerve
2. Surgery may be required if a disk fragment lodges in the spinal canal and presses on a nerve, causing significant loss of function. Surgical options in the lower back include microdiscectomy or laminectomy depending on the size and position of the disk herniation.
3. In the neck, an anterior cervical discectomy and fusion is usually recommended. This involves removing the entire disk to take the pressure off the spinal cord and nerve roots. Bone is placed in the disc space and a metal plate may be used to stabilize the spine.
4. Requires an overnight hospital stay. You should be able to return to work in two to six weeks.

Sciatica:

If you suddenly start feeling pain in your lower back or hip that radiates down from your buttock to the back of one thigh and into your leg, your problem may be a protruding disk in your lower spinal column pressing on the roots to your sciatic nerve.

Sciatica (lumbar radiculopathy) may feel like a bad leg cramp that lasts for weeks before it goes away. You may have pain, especially when you sit, sneeze or cough. You may also feel weakness, "pins and needles" numbness, or a burning or tingling sensation down your leg. See a doctor to have your condition diagnosed and start a course of treatment.

You're most likely to get sciatica when you're 30-50 years old. It may happen due to the effects of general wear and tear, plus any sudden pressure on the disks that cushion the vertebrae of your lower (lumbar) spine.

The gel-like inside (nucleus) of a disk may protrude into or through the disk's outer lining (annulus). This herniated disk may press directly on nerve roots that become the sciatic nerve. The nerve may also get inflamed and irritated by chemicals from the disk's nucleus.

About one in every 50 people experience a herniated disk. Of these, 10-25 percent have symptoms lasting more than six weeks. About 80-90 percent of people with sciatica get better, over time, without surgery.

Treatment

A physical exam may help pinpoint the irritated nerve root.

Most cases of sciatica affect the L5 or S1 nerve roots.

X-rays and other specialized imaging tools such as MRI

You might need surgery only if after 3 months or more of treatment you still have disabling leg pain. A part of the herniated disk may be removed to stop it from pressing on your nerve.

The surgery (laminotomy) may be done under local, spinal or general anesthesia.

You have a 90 percent chance of successful surgery if most of your pain is in your leg.

Avoid driving, excessive sitting, lifting or bending forward for at least a month after surgery.

Your doctor may give you exercises to strengthen your back.

Following treatment for sciatica, you will probably be able to resume your normal lifestyle and keep your pain under control. However, it's always possible for your disk to rupture again. This happens to about 5 percent of people with sciatica.

Emergency situation

In rare cases, a herniated disk may press on nerves that cause you to lose control of your bladder or bowel. If this happens, you may also have numbness or tingling in your groin or genital area. This is an emergency situation that requires surgery. Phone your doctor immediately.